**Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**atmosphere and Meteorology Project**

3.b.4-6

**General Directions**: Your group will be given three of the Virginia Beach Objectives related to this unit. Your group will be responsible for **researching the objectives, creating a lesson and developing an activity** to teach the three objectives you have been assigned to the rest of the class. Guiding questions have been provided to help you cover each objective. You will be using a PowerPoint slideshow to use as a visual aid to teach the lesson.

**Step 1**: Research your objective using books and resources provided (Databases located at <https://destiny.vbcps.com> and books). Take notes. Be sure to answer the guiding questions in a way that you can easily explain to your classmates. Diagrams, charts and graphs are great tools to visually interpret information. Collect citation information and save to a location you can access (jump drive, H Drive or SharePoint).

**Step 2:** Organize your information so that you can easily share it with others. Develop a PowerPoint presentation with your group to cover your topic. All group members must contribute to the PPT and participate in the presentation. Use the following format as a template for your PowerPoint.

PowerPoint format :

Slide 1-State Key Concept/Topic

Slide 2:  State objective

Slide 3-4:  Guiding Question with 3-5 bullet points

Slide 5:  State Objective

Slide 6-7:  Guiding Question with 3-5 bullet points

Slide 8:  State Objective

Slides 9-10:  Guiding Question with 3-5 bullet points

Slide 11:  Bibliography

Relevant photos/pictures throughout

**Step 3:** Develop activity to be used by classmates during lesson. All group members must contribute to the activity.

Make a matching activity to cover the processes and concepts in objective 3.b.4-6.

**Step 4:** As a group, practice teaching your lesson. Remember to use the PowerPoint as a guide but do not read it to the class

**ES3.b Atmospheric Properties**

**3.b.4 Relate air temperature to pressure (high and low pressure systems).**

*How does the pressure of air change as the temperature changes?*

*What is a high pressure system and what type of temperature might you find in a high pressure system?*

*Explain the same for a low pressure system.*

**3.b.5 Describe changes in the atmosphere and processes which cause the changes to occur including evaporation, condensation, transpiration and runoff.**

*Explain the processes of evaporation, condensation, transpiration, and runoff?*

*How does the water cycle play a role in the atmosphere?*

*How does the water cycle impact the atmosphere?*

**3.b.6 Describe the factors that influence the amount of water vapor (humidity) the air can hold.**

*What is humidity?*

*How does air hold water vapor?*

*What can change how much humidity the air can hold before it begins to rain?*